How to Make the Wilmington Inset Map

- Open ArcMap and create a new empty map
- Switch to layout view
- Page Setup→Change paper size to 48"w x 36"h, Landscape. REMEMBER to uncheck "Same as Printer" and "Scale map elements proportionally to changes in paper size" such as clicking on the general tab, coordinate system tab, and size and position tab.
- Change Data Frame Properties→Lower Left Corner should be at x=1, y=1. Frame width =45.25, height=33.5
- Change Frame Border to Custom
- Click '*l*" to change border symbol. Choose Change Symbol→Properties→Cartographic Line Symbol.
- Create 3 lines on left. All line should have Square Line Caps and Round Line Butts. Top line should be black, have a width of 2, and click on the line properties tab to create an offset of –12. Middle line should be black and have a width of 8. Bottom line should be white and have a width of 16, and and click on the line properties tab to create an offset –4. Click Ok til you get back to the map.
- Add the following layers (all layers in the Wilmington Directory, except the Wilmington Corridors Layer):
- DOT Primary Roads
- Counties
- Rivers
- Interchanges
- Urban Areas
- State Ports
- Water Features

- Change the Rivers Layer to a width of 1 and color→ Apatite Blue
- Change the Water Features to Apatite Blue, No Outline

▪ Change the Urban Areas to Yucca Yellow, No Outline

▪ For the State Ports, Go into the Symbol Properties, change the type to a Character Marker Symbol, Change the font to ESRI Cartography, and choose the anchor symbol (Index # 206). Change the size to 34

▪ For the Counties, Go into the Symbol Properties, change the color to None, go into the Outline Properties, Change the type to Cartographic Line Symbol and add a second line. The bottom line should be Solar Yellow and a width of 3, and have square line caps and round line joins. For the time line, choose the template tab then drag the gray bar to the right. You'll want to create a pattern that is 6 Black squares, followed by 2 white squares, 2 black squares, then 2 white squares, then 2 black squares, then 3 white squares. This line should have a width of 3, with butt line caps and round line joins. Click OK til you get back to the map.

▪ Now zoom into the Wilmington area (using data zoom). Then change the scale at the top of the page to 1:30,000. Using the data pan, move the map so the entire Wilmington Outer Loop is shown while showing the southwest corner of Pender County.

▪ For the next step, make sure TrainingClass.sty file is added. To do this, go to the Tools Menu, choose Styles, Styles References, Add, and choose the "TrainingClass.style" file.

▪ For the Interchange Layer, go into the layer properties and choose symbol. Then change the Categories→Unique Values. Choose the "Type" field. Choose add all values. Uncheck "All Other Values" even though the count is zero. Change the "Existing" Symbol to the Existing Interchange Symbol and change the "Proposed" to the Proposed Interchange Symbol. Both sizes should be 40. Also change the label of each to the appropriate interchange type.

- For the DOT Primary Roads, go into the layer properties and choose symbology. Then change the Categories→Unique Values. Choose the "RTTYPTXT1".

  Then choose add values … and select "NC" and "US". Uncheck "Add all other values". Double click on the line symbol next to the NC to go into the line symbol selector. Choose properties, change the type to a cartographic line symbol, change the line joins to round, the width to 1.5 and the color to Gray 60%. Do the same for the US Route symbol but make the color Gray 80% and the line width 3.

- To add the background roads for each county, click add data, then go into the County\dot.av folder and add the file called "dotroads". Do this for all three counties (Brunswick, Pender, and New Hanover). Make sure as you add each dotroads file, you rename the layer in the Table of Contents to the appropriate name, i.e. Brunswick Roads. Then change the style on each line to a width of 0 and color of gray 40%.

- To Add the ILM Airport, click on add data, then go back into the New Hanover\dot.av folder and add the dotairport layer. Change the symbol to gray 70% and a width of 1.

- I've made it easy to add the Transportation Improvements and interstates on the map. Click on add data and add the "Wilmington Corridors Layer". Notice what happens when all the layers that are added. As you can see, there are multiple copies of the Wilmington Corridors shape file, but each time the layer appears, it displays a different facility, based on different fields.

- The way I labeled the map is a manual process. Basically, I created text and just copied (ctrl c) and pasted (ctrl v) it to different areas on the map. As you can see, there are different sizes and colors, which correspond to the different names on the map.

- The County Name is Arial, All Caps, Size 54 Bold, with character spacing set at 80

- The Major City name (50,000+) is set at Arial, Size 60 Bold

- The Town name is set at Arial, Size 30 Bold

- The Airport name is set at Arial, Size 24 Bold

- From previous exercises you should know how to label the roads. Again this was done manually, just by adding text and changing the symbol to an existing symbol.

- The Interstate Symbol Background is size 60, and text is Arial, Size 20 Bold

- The US Route Symbol Background is size 44, and the text is Arial, Size 16 Bold

- To add the green circles, just draw a new circle on the map. To get specific, the width and height of the circle "block" is 0.9. The color of the circle is fir green Then just add the text on top of it. The text in the circles is Arial, Size 60 Bold. When you are finished, select both elements and group them together so they can be easily moved around together.

- To add the Table on the top left, open up the Excel file called Wilmington Inset Map Projects. All you should have to do is select and copy the table that is outlined in excel and paste (ctrl v) it into the map in ArcMap. Once it is in ArcMap, right click on the table and go into the properties to change the background to white. Click on the Size and Position tab, click the top center anchor point and change the x coord. to 9.095, and the y coord. to 33.8, and the width to 14.79 and height to 7.

- Since you should already know how to do the legend, here are some other coordinates/sizes for this map…

- Map Title (Transportation Improvements in the Wilmington Area): Anchored from Top Center- x=22.426947, y=4.8, font= Arial, Size 80 Bold
- North Arrow: Anchored from Top Center-x= 42, y=16.88, width=3.12
- Word "Legend": Anchored from Top Center-x=37.778, y=13.5, w=8.278424
- Legend: Anchored from Bottom Center-x=42, y=4.2, All Legend Items are Arial, Size 24 Bold
- Author and Date (Prepared By): Anchored from Bottom Center-x=42, y=2.5
- Scale: Anchored from Bottom Center-x=42, y=1.5. Two Divisions and Two Subdivisions